

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028918**Date Inspected:** 26-Dec-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

<b>CWI Name:</b>	Barry Drake and William Sherwood			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	SAS Tower and OBG		

**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 2W-PP13.5-W5 deck access hole inside, QA randomly observed ABF/JV welder Chris Bruce continuing to perform CJP groove welding third time repair on a Non-Seismic Performance Critical Member (SPCM) due to Ultrasonic Testing (UT) detected defect on welded splice butt joint. The welder excavated the defect using a die grinder and after its completion, ABF QC Salvador Merino performed Magnetic Particle Testing (MT) on the removal of the defects with no relevant defect noted during the test. The welder was noted using propylene gas torch to preheat the repair area and its vicinity to 150°F and as soon as the required temperature was attained the welder started performing the welding repair. Welder Chris Bruce was observed welding in 4G (overhead) position utilizing the Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000 Repair. Welder Chris Bruce was noted welding at the following locations; Y=2200mm, with the excavation dimensions of 120mm long x 40mm wide x 12mm deep and utilizing the RWR #201212-039 as a reference. The second location was noted at Y=3600mm, with excavation dimensions of 100mm long x 50mm wide x 12mm deep and utilizing the RWR #201212-041 as a reference. During welding, ABF QC Barry Drake was noted monitoring the welding parameters which were noted as 126 amperes. The R3 cycle repair welding was completed during this shift at both locations.

At OBG 12E-PP116.5-E5 deck access hole inside, QA randomly observed ABF/JV qualified welder Ric Chouinard perform fillet welding on both sides of 485W plate stiffener to deck access hole infill plate. The welder

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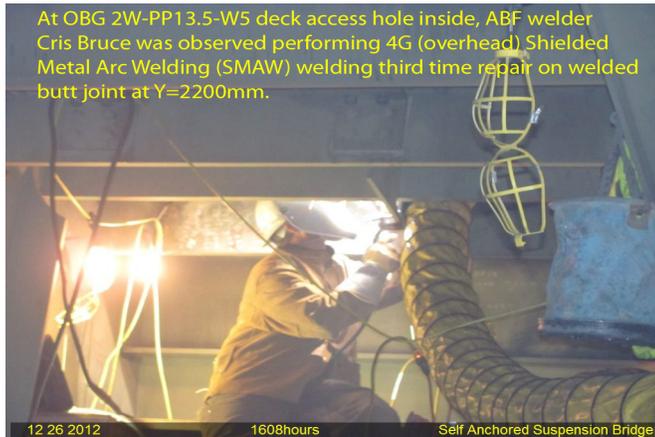
# WELDING INSPECTION REPORT

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was noted fillet welding the area where it was left by the contractor from ZPMC, China. The welder was observed welding in the 4F (overhead) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-F1200A Rev. 1. The fillet weld connection was preheated to more than 250 degree Fahrenheit using propane gas torch prior welding. The welding activity was monitored by ABF QC William Sherwood. During the shift, the welder has completed the 8mm fillet welding on both sides of the plate stiffener (PS1) to the deck access hole infill plate.



## Summary of Conversations:

No significant conversation occurred today.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

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**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

**Reviewed By:** Reyes, Danny

QA Reviewer

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